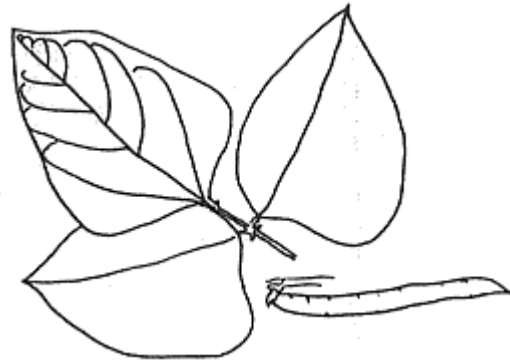


Green Manures No. TGM22

Cowpea, *Vigna unguiculata* *Unguiculata* spp.

Green manures are plants which are grown mainly for the benefit of the soil. They can be grown as part of a rotation or in an intercropping system to build soil fertility, or as a cover crop to protect bare soil from erosion. Full details on the benefits and practice of using green manures can be found in HDRA's booklet 'Green manures/Cover crops'.

Other common names include crowder pea, black-eyed pea, southern pea



Growing conditions

- Annual rainfall: Cowpea prefers rainfall of 400mm and over.
- Altitude: It grows well at altitudes up to 1500m.
- Temperature: It does not tolerate very cold or frosty conditions and prefers 12° C to 30° C.
- Soil type: It thrives on a wide range of well drained soils, from pH 4.3 to 7.9.

Nitrogen fixation

Cowpea is a legume. This means that it has nodules on its roots which contain bacteria. These bacteria take nitrogen from the air. This is known as nitrogen fixation. The plant uses this to grow and when the legume is dug into the soil, the extra nitrogen is made available to the next crop.

Cultivation

Broadcast sow at a rate of 90kg/ha on rough seed beds and cover to a maximum of 7.5cm depth. Alternatively sow in rows at a rate of 10 to 40kg/ha. Cowpea is often used intercropped with other crops such as cassava, corn, sorghum, sudangrass, millet, peanuts or soybeans.

Irrigation is rarely required.

Dig in any time up to flowering.

Growth form

Cowpea is a spreading plant reaching 80cm tall.

Recommended application

Grow velvetbean as a cover crop or green manure to suppress weeds, add fertility and control erosion.

Human food

The seeds are eaten shelled or dried. The pods and young leaves are consumed as a vegetable.

Animal food

The plant can be used to make hay, ensilage (mixed with corn or sorghum) or pasturage.

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